AMENDMENTS TO THE SPECIFICATION

The abstract of the disclosure is amended to read as follows:

Exemplary embodiments of the invention include a A method and system for providing dynamic verification and alignment of production tool loadports in an automated material handling system environment. The method includes transmitting light beams from a production tool loadport fixture to an overhead transport vehicle, reading values received from the light beams by a detector mounted on the overhead transport vehicle, calculating an offset value as a result of reading the values, and adding an identification for the production tool to a tool map. The method also includes adding the The offset value for the production tool is added to the tool map and compensating for the offset values are compensated for without taking the production tool offline by aligning the overhead transport vehicle with the production tool loadport fixture in accordance with the offset value.